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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No.	Applicant(s)	
	10/549,308	KIMURA, SHINYA	
	Examiner	Art Unit	
	ABU SHOLEMAN	4148	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 16 September 2005.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-13 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-3 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 09/16/2005 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 03/28/2008 and 09/16/2005.

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .
5) Notice of Informal Patent Application
6) Other: _____.

DETAILED ACTION

1. This instant application having application NO.10/549308 filed on 09/16/2005 is presented for examination by the examiner.

Oath/Declaration

2. The applicants' oath/declaration had been reviewed by the examiner and is found to conform to the requirements prescribed in **37.C.F.R.1.63**.

Priority

3. As required by **M.P.E.P.201.14(c)**, acknowledgement is made of applicant's claim for priority based on applications filed on March 20, 2003 (JP03/03413).

Information Disclosure Statement

4. The information disclosure statement (IDS) submitted on The information disclosure statement (IDS) submitted on 03/28/2008 and 09/16/2005 have been acknowledged. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

5. The drawings were received on 09/16/2005. These drawings are acceptable for examination purpose.

Claim Objections

6. Claim 5 recites the limitation "said outputted secondary conversion data" in Page 44, Line 16. There is insufficient antecedent basis for this limitation in the claim.

7. Claim 6 recites the limitation "said outputted secondary conversion data" in page 46, line 1. There is insufficient antecedent basis for this limitation in the claim.

8. Claim 8 recites the limitation "same unique codes" in page 46, line 1. There is insufficient antecedent basis for this limitation in the claim.

9. Claim 13 recites the limitation " said outputted secondary conversion data " in page 48, line 20. There is insufficient antecedent basis for this limitation in the claim.

10. Appropriate correction is required.

Claim Rejections - 35 USC § 101

11. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

12. Claim 9 is rejected under 35 U.S.C 101 as directed to non-statutory subject matter of software, per se. The claim lacks the necessary physical articles or objects to constitute a machine or manufacture within the meaning of 35 U.S.C 1001. It is clearly not a series of steps or acts to be a process nor they are a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. It is at best, function descriptive material per se.

Descriptive material can be characterized as either “functional descriptive material” or ” nonfunctional descriptive material “. Both types of “descriptive material” are non-statutory when claimed as descriptive material per se, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994).

Merely claiming non-functional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because “[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer.”).

In this case, applicant has claimed a "program for causing" of the king set forth characterized in that a software program caused an information management computer for execution that is implemented by a software language; this implies that a applicant is claiming a software program, *per se*, lacking the hardware necessary to realize any of the underlying functionality. Therefore , claim 9 is directed to non-statutory subject matter as an encryption program, *per se*, i.e. the descriptions or expressions of the programs, are not physical "things". They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed a program for causing does not define any structural and functional interrelationships between a program and other claimed elements of a computer readable medium, which permit a program functionality to be realized.

13. Claims 10-13 are rejected under 35 U.S.C 101 as non-statutory for at least the reason stated above. Claims 10-13 are depended on claim 9, however, they do not add any feature or subject matter that would solve any of the non-statutory deficiencies of claim 9.

Claim Rejections - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. Claims 1,2,9 and 10 are rejected under 35 U.S.C 102(b) as being anticipated by Shiraishi et al (JP 2002-149497)

As per claim 1, Shiraishi discloses “ An information management apparatus for processing data containing personal data comprising” as (**Page 1, paragraph 0001, line 1-2, The privacy information protection system**): “ personal data extraction means for extracting personal data from processing-object data” as (**page 2, paragraph 0005, line 1-2, An information acquisition means to acquire the privacy information as which this invention was inputted by the user**) ; “unique code generation means for performing an operation using one-way function on the basis of personal data extracted by said personal data extraction means, to generate a unique code” as (**page 3, paragraph 0011, line 2-4, The coupler combines the privacy information inputted without minding the identification information and the hash processor by which has processing was carried out to generate for unique key**); and “primary conversion data generation means for replacing personal data of said processing-object data with said unique code, to generate primary conversion data” as (**page 3, Paragraph 0012, line 1-3, a user inputs the**

identification information used as the key into the privacy information in order to convert it into primary conversion).

As per claim 2, Shiraishi discloses “ which further comprises storage means for storing said primary conversion data and said processing-object data on which said primary conversion data are based in a state in which these data are correlated with each other” as (**Page 3, paragraph 0011, line 7-9, The hash information and privacy information of identification information which were matched mutually are stored in the storage**).

As per claim 9, Shiraishi discloses “ A program for causing an information management computer for processing data containing personal data to execute processing comprising the steps of” as (**Page 1, paragraph 0001, line 1-2, The privacy information protection system**): “extracting personal data from processing-object data by means of personal data extraction means” as (**page 2, paragraph 0005, line 1-2, An information acquisition means to acquire the privacy information as which this invention was inputted by the user**), “performing an operation using a one-way function on the basis of the personal data extracted by said personal data extraction means by means of unique code generation means to generate a unique code” as (**page 3, paragraph 0011, line 2-4, The coupler combines the privacy information**

inputted without minding the identification information and the hash processor by which has processing was carried out to generate for unique key), and “replacing personal data of said processing-object data with said unique code by means of primary conversion data generation means to generate primary conversion data” as (page 3, Paragraph 0012, line 1-3, a user inputs the identification information used as the key into the privacy information in order to convert it into primary conversion).

As per claim 10, Shiraishi discloses “ which is for causing said information management computer to execute the processing which further comprises the step of storing said primary conversion data and said processing-object data as an origin of said primary conversion data in storage means in a state in which they are correlated with each other” as (Page 3, paragraph 0011, line 7-9, The hash information and privacy information of identification information which were matched mutually are stored in the storage).

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the

prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. **Claims 3-4 and 11-12 are rejected under 35 U.S.C.103(a) as being unpatentable over Shiraishi et al (JP 2002-149497) in view of Robert et al (Patent Number : 5724423).**

As per claim 3, Shiraishi discloses “ An information management apparatus as recited in claim 1, wherein said unique code generation means comprises a reference character string generation means for generating a reference character string from personal data extracted by said personal data extraction means” as (**see rejection above claim 1**), and **but fails to expressly disclose** “operation means for operating a predetermined processing-object character string by means of said one-way function using said reference character string as a key, to generate said unique code”.

However, **Robert discloses** “operation means for operating a predetermined processing-object character string by means of said one-way function using said reference character string as a key, to generate said unique code” as [**column 3, line 2-5, The personal identification string is encoded using one of a plurality of encoded algorithms(one-way hashing) selected based on an encoding key determined for each transaction based on the code**].

Shiraishi and Robert are analogous arts because they are the same field of endeavor of the privacy information protection system.

Therefore, It would have been obvious to one of the ordinary skill in the art at the time of the invention was made to modify the teaching of **Shiraishi** by including encoding the personal identification with encoded key that taught by **Robert** because it would provide a user authentication service that offers a high level of security but yet is still user friendly (column 2, line 25-27).

AS per claim 4, Robert discloses “ An information management apparatus as recited in claim 3” as (see rejection above claim 3), “wherein said operation means comprises digit number determination means for determining an operation digit number on the basis of said reference character string” as (**column 2, line 63-66, a personal identification string including the steps of entering a personal identification string generating a multi-digit code**), “processing-object character string generation means for generating an processing-object character string having said operation digit number and operation execution means for operating said processing-object character string by means of said one-way function using said reference character string as a key” as (**column 3, line 2-5, The personal identification string is encoded using one of a plurality of encoded algorithms selected based on an encoding key determined for each transaction based on the code**).

As per claim 11, Shiraishi discloses “The program of claim 9, wherein the step of generating the unique code by said unique code generation means comprises the steps of: generating a reference character string from personal data, which are extracted by said personal data extraction means, by means of a reference character string generation means” as (**see rejection above claim 9**); **but fails to expressly disclose** “operating a predetermined operation-object character string by means of said one-way function using said reference character string as a key to generate said unique code”.

However, **Robert discloses** “operating a predetermined operation-object character string by means of said one-way function using said reference character string as a key to generate said unique code” as [**column 3, line 2-5, The personal identification string is encoded using one of a plurality of encoded algorithms (one-way hasing) selected based on an encoding key determined for each transaction based on the code**].

Shiraishi and Robert are analogous arts because they are the same field of endeavor of the privacy information protection system.

Therefore, It would have been obvious to one of the ordinary skill in the art at the time of the invention was made to modify the teaching of **Shiraishi** by including encoding the personal identification with encoded key that taught by

Robert because it would provide a user authentication service that offers a high level of security but yet is still user friendly (column 2, line 25-27).

As per claim 12, Robert discloses “ wherein the step of generating said unique code with said operation means comprises the steps of: determining an operation digit number on the basis of said reference character string by means of digit number determination means” as (**column 2, line 63-66, a personal identification string including the steps of entering a personal identification string generating a multi-digit code**); “generating an operation-object character string having said operation digit number by means of operation-object character string generation means; and operating said operation-object character string by means of said one-way function by operation execution means using said reference character string as a key” as (**column 3, line 2-5, The personal identification string is encoded using one of a plurality of encoded algorithms selected based on an encoding key determined for each transaction based on the code**).

18. **Claims 5 and 13 are rejected under 35 U.S.C.103(a) as being unpatentable over Shiraishi et al (JP 2002-149497) in view of Yoshida et al (JP 11045304).**

As per claim 5, Shiraishi discloses “An information management apparatus as recited in claim 1” as (see rejection above claim 1), **but fails to expressly disclose** “which further comprises a secondary conversion data generation means for encrypting said primary conversion data to generate secondary conversion data, output means for outputting said secondary conversion data to other apparatus, and storage means for storing said outputted secondary conversion data, said primary conversion data on which said secondary conversion data are based, said processing-object data on which said primary conversion data are based and records of output from said output means in a state in which these data and records are correlated with one another when said secondary conversion data are outputted from said output means”.

However, Yoshida discloses “which further comprises a secondary conversion data generation means for encrypting said primary conversion data to generate secondary conversion data, output means for outputting said secondary conversion data to other apparatus, and storage means for storing said outputted secondary conversion data, said primary conversion data on which said secondary conversion data are based, said processing-object data on which said primary conversion data are based and records of output from said output means in a state in which these data and records are correlated with one another when said secondary conversion data are outputted from said output means” as (**page 5, paragraph 0014-0015, line 1-8, Characterized by establishing an encryption means to encipher and to make it transmit, when transmitting**

the data by which central control out in the data control organization through a network and the data control organization is characterized by enciphering the data which should be out central control and making it store in concentration data storage equipment).

Shiraishi and Yoshida are analogous arts because they are the same field of endeavor of the privacy information protection system.

Therefore, It would have been obvious to one of the ordinary skill in the art at the time of the invention was made to modify the teaching of **Shiraishi** by including encryption to the data control organization and make it transmit by enciphering to the concentration data storage that taught by **Yoshida** because it would provide a right defined authentication for a user or a user group (page 4, paragraph 0012, line 2-4).

As per claim 13, Shiraishi discloses “ The program of claim 9” as (see rejection above claim 9),**but fails to expressly disclose** “ which is for causing said information management computer to execute the processing which further comprises the steps of: encrypting said primary conversion data by means of secondary conversion data generation means to generate secondary conversion data; outputting said secondary conversion data to other apparatus by output means; and causing storage means, when said secondary conversion data are outputted from said output means, to store said outputted secondary conversion

data, said primary conversion data as an origin of said secondary conversion data, said processing-object data as an origin of said primary conversion data and records of the output from said output means, in a state in which they are correlated with one another".

However, **Yoshida discloses** "which is for causing said information management computer to execute the processing which further comprises the steps of: encrypting said primary conversion data by means of secondary conversion data generation means to generate secondary conversion data; outputting said secondary conversion data to other apparatus by output means; and causing storage means, when said secondary conversion data are outputted from said output means, to store said outputted secondary conversion data, said primary conversion data as an origin of said secondary conversion data, said processing-object data as an origin of said primary conversion data and records of the output from said output means, in a state in which they are correlated with one another" as (**page 5, paragraph 0014-0015, line 1-8, Characterized by establishing an encryption means to encipher and to make it transmit, when transmitting the data by which central control out in the data control organization through a network and the data control organization is characterized by enciphering the data which should be out central control and making it store in concentration data storage equipment**).

Shiraishi and Yoshida are analogous arts because they are the same field of endeavor of the privacy information protection system.

Therefore, It would have been obvious to one of the ordinary skill in the art at the time of the invention was made to modify the teaching of **Shiraishi** by including encryption to the data control organization and make it transmit by enciphering to the concentration data storage that taught by **Yoshida** because it would provide a right defined authentication for a user or a user group (page 4, paragraph 0012, line 2-4).

19. **Claims 6-8 are rejected under 35 U.S.C.103(a) as being unpatentable over Kawagishi et al (JP 2002279062) in view of Shiraishi et al (JP 2002-149497)and further in view of Yoshida et al (JP 11045304).**

As per claim 6, Kawagishi discloses "An information management system which comprises an information management apparatus for processing data containing personal data and an information center apparatus for managing data processed with said information management apparatus, the information management apparatus and the information center apparatus being connected to each other through a communication line" as (page 8, paragraph 0008, line 1-8,

the information management equipment with which the personal information for two or more persons was stored as for the personal information management system concerning this invention, Two or more terminal units connected to his main part of information management equipment possible data communication through a network , It has the portable storage with which this terminal unit is equipped possible data communication and is aimed at what reads personal information from the main part of information management equipment through trough the terminal unit with which it was equipped with the portable storage); **but fail to expressly disclose** "said information management apparatus comprising: personal data extraction means for extracting personal data from processing-object data; unique code generation means for performing an operation using one-way function on the basis of personal data extracted by said personal data extraction means to generate a unique code; primary conversion data generation means for replacing the personal data of said processing-object data with said unique code to generate primary conversion data; secondary conversion data generation means for encrypting said primary conversion data to generate secondary conversion data; output means for outputting said secondary conversion data to said information management apparatus through said communication line; and storage means for storing, when said secondary conversion data are outputted from said output means, said outputted secondary conversion data, said primary conversion data as an original of said secondary conversion data, said processing-object data as an original of said primary conversion data and records of the output made by said output means, in a state

in which they are correlated with one another; said information center apparatus comprising: receiving means for receiving secondary conversion data transmitted from said information management apparatus; and decryption means for decrypting secondary conversion data received by said receiving means to generate said primary conversion data".

However, **Shiraishi discloses** "said information management apparatus comprising" as (**Page 1, paragraph 0001, line 1-2, The privacy information protection system**): "personal data extraction means for extracting personal data from processing-object data" as (**page 2, paragraph 0005, line 1-2, An information acquisition means to acquire the privacy information as which this invention was inputted by the user**); "unique code generation means for performing an operation using one-way function on the basis of personal data extracted by said personal data extraction means to generate a unique code" as (**page 3, paragraph 0011, line 2-4, The coupler combines the privacy information inputted without minding the identification information and the hash processor by which has processing was carried out to generate for unique key**); "primary conversion data generation means for replacing the personal data of said processing-object data with said unique code to generate primary conversion data" as (**page 3, Paragraph 0012, line 1-3, a user inputs the identification information used as the key into the privacy information in order to convert it into primary conversion**);

Kawagishi and Shiraishi are analogous arts because they are the same field of endeavor of the privacy information protection system.

Therefore, It would have been obvious to one of the ordinary skill in the art at the time of the invention was made to modify the teaching of **Kawagishi** by including unique key from personal data that taught by **Shiraishi** because it would provide a user authentication service that offers a high level of security but yet is still user friendly (column 2, line 25-27).

Furthermore, **Yoshida discloses** “secondary conversion data generation means for encrypting said primary conversion data to generate secondary conversion data; output means for outputting said secondary conversion data to said information management apparatus through said communication line; and storage means for storing, when said secondary conversion data are outputted from said output means, said outputted secondary conversion data, said primary conversion data as an original of said secondary conversion data, said processing-object data as an original of said primary conversion data and records of the output made by said output means, in a state in which they are correlated with one another ” as (**page 5, paragraph 0014-0015, line 1-8, Characterized by establishing an encryption means to encipher and to make it transmit, when transmitting the data by which central control out in the data control organization through a network and the data control organization is characterized by enciphering the data which should be out**

central control and making it store in concentration data storage equipment); “said information center apparatus comprising: receiving means for receiving secondary conversion data transmitted from said information management apparatus” as (page 8, paragraph 0035, line5-6, **In the medical support service establishment, in order to be able to use the received medical data with application data encryption equipment**); and “decryption means for decrypting secondary conversion data received by said receiving means to generate said primary conversion data” as (page 8, paragraph 0035, line 5-7, **In the medical support service establishment, in order to be able to use the received medical data with application equipment. it decrypts to the original data**).

Kawagishi and Yoshida are analogous arts because they are the same field of endeavor of the privacy information protection system.

Therefore, It would have been obvious to one of the ordinary skill in the art at the time of the invention was made to modify the teaching of **Kawagishi** by including the data transmission management support system that taught by **Yoshida** because it would provide a centralized control over the received data (see Abstract).

As per claim 7, Kawagishi discloses “wherein said information center apparatus further comprises data storage means for storing primary conversion

data generated by said decryption means and processes data stored in said data storage means by means of said unique code as a key" as (**page 15, paragraph 0065, line 1-3, By decrypting the encryption characteristic data supplied from patient IC card using session key, a server takes out a patient's characteristic data**).

As per claim 8, Kawagishi discloses "wherein said information center apparatus detects data containing the same unique code from a plurality of data containing said unique codes stored in said data storage means" as (**page 14, paragraph 0052, line 1-3, A server is sent out to patient IC card equipped with personal data check**).

Conclusion

20. The following prior art made of record and not relied upon is cited to establish the level of skill in the applicant's art and those arts considered reasonably pertinent to applicant's disclosure. See MPEP 707.05(c).
21. The following reference teaches execution of trial data.

US 5724423

US 4922417

JP 406187338

JP 2002149497

JP 2002245164

JP 2002279062

JP 11045304

22. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Abu Sholeman whose telephone number is (571)270-7314. the examiner can normally be reached on Monday to Friday 8:30 AM to 5.00PM.

If attempts to reach the above noted Examiner by telephone are unsuccessful, the Examiner's supervisor, Thomas Pham, can be reached at the following telephone number (571)2272-3689.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from the either Private PAIR or public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pari-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center(EBC) at 866-217-9197(toll-free).

November 1, 2008

/A.S./

Abu Sholeman

Examiner

Art Unit 4148

/THOMAS K PHAM/

Supervisory Patent Examiner, Art Unit 4148